

In the
United States Court of Appeals
For the Seventh Circuit

No. 01-4061

VANESSA G. CHAPMAN, as Special
Personal Representative of the ESTATE
OF KYLE E. CHAPMAN, JR., deceased,

Plaintiff-Appellee,

v.

MAYTAG CORPORATION,

Defendant-Appellant.

Appeal from the United States District Court
for the Southern District of Indiana, Indianapolis Division.
No. 99 C 39—**Kennard P. Foster**, *Magistrate Judge*.

ARGUED MAY 21, 2002—DECIDED JULY 29, 2002

Before BAUER, COFFEY, and RIPPLE, *Circuit Judges*.

BAUER, *Circuit Judge*. Vanessa Chapman filed a wrongful death suit against Maytag Corporation on behalf of the estate of her late husband, Kyle Chapman. Mr. Chapman was electrocuted when he touched a metal surface energized by a current emanating from a Maytag range in the Chapman's home. The case was tried to a jury, which returned a verdict and substantial damages in favor of the Chapmans. Maytag appeals the verdict arguing, among other things, that the district court erroneously admitted the testimony of the Chapman's expert without satisfying the mandates of Rule 702 and the *Daubert* test.

We agree with Maytag that the district court failed to properly apply the analytical principles set forth in *Daubert* and as a result, we reverse the decision of the district court and remand the case for a new trial.

BACKGROUND

On January 2, 1997, Kyle and Vanessa Chapman purchased a Magic Chef range manufactured by Maytag Corporation. With the range, the Chapmans received an Owner's Guide, a Gas Installation Manual and a warning label, affixed to the range's power cord. All three documents specifically advised the consumer that the range must be plugged into a properly grounded three-hole receptacle in compliance with local rules and the National Electrical Code, and that failure to do so may result in shock hazard. Nevertheless, Mr. Chapman plugged the range into a kitchen outlet that he previously installed himself as part of some remodeling to their home. This outlet had a three-hole, grounding type receptacle but Mr. Chapman did not install it correctly: he failed to install a grounding wire and, contrary to the explicit Maytag warnings, the outlet was not grounded.

The Maytag range was manufactured in 1996 at Maytag's Magic Chef factory in Cleveland, Tennessee. The parties do not dispute that the range was defective when it left the Maytag factory. When it was assembled, a wire branching off the power cord that is designed and intended to be enclosed within a metal housing on the rear of the unit instead became pinched between the metal frame of the range and the back cover plate that covered the electrical wiring. Over time, the insulation on the pinched wire wore down and increasing amounts of electrical current ran into the stove housing, on to the gas line, into the wall, and eventually to the heating ducts.

On several occasions in late July and early August of 1998, the Chapmans experienced electrical shocks from cur-

rents in running water in their home. Then, on August 3, Mr. Chapman sustained a severe shock from touching the gas meter while outside painting. On August 5, Mr. Chapman was in the crawl space under the home when he came in contact with the energized metal surface of a heating duct and was fatally electrocuted. It was ultimately determined that the Maytag range was the source of the electrical current.

Mrs. Chapman filed a wrongful death suit against Maytag on behalf of her husband's estate. The suit alleged that the Maytag range was defective and that the defect was the cause of Mr. Chapman's death. It is undisputed that over time, the insulation covering the pinched wire had broken down and caused a short circuit, allowing electricity to flow from the pinched wire and ultimately to the ductwork. The parties disagree on the nature of the short circuit. Maytag argues that the defect in the range was not the source of the accident and that Mr. Chapman's death could have been avoided had he plugged the range into a properly grounded outlet, as directed. Mrs. Chapman insists that the accident would have occurred regardless of whether or not the outlet was grounded.

On January 13, 2000, Maytag moved for summary judgment, proffering the affidavit of its expert, Dr. Andrew Neuhalfen, who holds a Ph.D. in Materials Engineering and a B.S. in Electrical Engineering. Dr. Neuhalfen testified that prior to Mr. Chapman's accident, there was a complete, instantaneous breakdown of the insulation covering the pinched wire. Had the outlet been properly grounded, the current flowing into the frame of the range would have been sufficient to trip the circuit breaker instantaneously, thus terminating the electric current to the outlet to which the stove was connected. According to Dr. Neuhalfen, this would have happened some time prior to the time that Mr. Chapman came into contact with the metal ductwork in the crawl space. Dr. Neuhalfen, there-

fore, attributed the circuit breaker's failure to trip to the undisputed fact that the outlet was not grounded. He concluded the accident would have been prevented had the outlet been properly grounded. Based on this expert testimony, Maytag argued that its range was not defective as a matter of law because it was accompanied by adequate warnings, which, if followed, would have rendered the product safe despite the presence of the pinched wire.

In response to Maytag's summary judgment motion, Mrs. Chapman proffered an affidavit of her own expert, James Petry, who holds an undergraduate degree in Mechanical Engineering. Petry put forth an alternative theory as to why the circuit breaker failed to trip at the time of the accident: a "resistive short" theory; that is, the short circuit created by the pinched wire was a resistive short, rather than a direct short. Petry opined that vibrations in the floor of the Chapman's kitchen caused the insulation covering the pinched wire to wear through and as a result, current escaped from the circuit and passed through the insulation, into the range chassis, then through the gas line to the furnace and eventually to the heating ducts. Petry stated that this leaked current eventually became high enough to electrocute Mr. Chapman, but was not high enough to trip the circuit breaker in the electrical panel of the house. Based on this "resistive short" theory, Petry asserted that the accident would have occurred regardless of whether the outlet was properly grounded. Petry represented to the court that he was "currently designing a testing procedure which when completed will conclusively prove this theory to be true."

Maytag filed a reply and a motion *in limine* to bar Petry's testimony as an expert, arguing that Mrs. Chapman failed to satisfy the requirements for expert testimony pursuant to Rule 702 and the *Daubert* standard. The court denied Maytag's summary judgment motion, as well as its motion *in limine*. However, the court did find that

Petry “failed to specify the details supporting his opinion that Mr. Chapman would have been electrocuted,” regardless of whether the outlet was properly grounded. Moreover, the court stated that the lack of any scientific testing presented a “serious problem for the status of Petry’s testimony as expert opinion.” Nevertheless, the court held that Maytag did not adequately demonstrate that Petry’s testimony did not qualify as expert testimony.

At trial, Maytag renewed its objection to Petry’s testimony as an expert, but the objection was overruled. After the jury returned a verdict in favor of the Chapmans, Maytag moved for a new trial, again arguing that Petry’s “resistive short” theory should have been excluded pursuant to Rule 702 and the *Daubert* standard. Maytag also argued that the trial court’s rulings in Pretrial Order No. 2 were erroneous. The district court denied Maytag’s motion and this appeal followed.

ANALYSIS

A. Expert Testimony

Maytag first argues that the district court erroneously admitted Petry’s testimony because none of the requisite reliability criteria for the admission of scientific expert testimony was satisfied. Matters relating to the admissibility of scientific expert testimony are governed by Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). We first undertake a *de novo* review of whether the district court properly followed the analytical framework established in *Daubert*. *Bradley v. Brown*, 42 F.3d 434, 436-37 (7th Cir. 1994). Provided the district court adhered to *Daubert*’s parameters, we will disturb the district court’s findings only if they are manifestly erroneous. *Id.*

Under *Daubert*, the district court is to perform a gate-keeping function and conduct a two-step analysis be-

fore admitting expert scientific testimony under Rule 702. First, the court must determine whether the expert's testimony reflects scientific knowledge; that is, the court must make "a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid." *Daubert*, 509 U.S. at 592-93. This requires the court to consider whether the testimony has been subjected to the scientific method, ruling out any subjective belief or unsupported speculation. *Porter v. Whitehall Labs. Inc.*, 9 F.3d 607, 614 (7th Cir. 1993). The second part of the *Daubert* analysis requires the district court to determine "whether the evidence or testimony assists the trier of fact in understanding the evidence or in determining a fact in issue." *Id.* at 616. In other words, "the suggested scientific testimony must 'fit' the issue to which the expert is testifying." *Id.*; see also *O'Conner v. Commonwealth Edison Co.*, 13 F.3d 1090, 1106 (7th Cir. 1994).

Maytag contends that Petry's testimony did not meet the first prong of the *Daubert* test. Petry concluded that the insulation enclosing the pinched wire eventually became compromised, allowing a fatal amount of electrical current to "leak through" the insulation of a 120 volt wire without tripping a 20-amp circuit breaker. He further hypothesized that this leakage occurred for weeks prior to the accident, without completely destroying the insulation or causing a direct short. Consequently, according to Petry, the grounding of the receptacle would not have prevented the electrocution. In response, Maytag argued that Petry was not qualified to offer such an opinion about electricity because: he does not have sufficient knowledge or experience in the field, he has no graduate training in electrical engineering, he does not attend education classes or seminars regarding electrical engineering, he has never published or lectured in the field of electrical science or engineering, and he has never previously testified as an expert on electrical issues. Maytag further ar-

gues that Petry never offered any study or writing to back up his theory and more specifically, he could not substantiate his opinion that it is even possible for a fatal amount of electrical current to “leak through” the insulation to an uninsulated surface without tripping the circuit breaker. Maytag asserts that Petry could not even show that the scientific community recognizes the concept of a “resistive short” or the principles on which this purported phenomenon is based.

We agree with Maytag that the district court failed to properly assess whether Petry’s theory is scientifically valid. The purpose of the *Daubert* standard is to ensure that any admitted scientific evidence is reliable; that is, well-grounded in methods and procedures of science. *Bourelle v. Crown Equip. Corp.*, 220 F.3d 532, 536 (7th Cir. 2000). The focus of the district court’s *Daubert* inquiry must be solely on principles and methodology, not on the conclusions they generate. *Cummins v. Lyle Indus.*, 93 F.3d 362, 368 (7th Cir. 1996). *Daubert* sets forth a nonexclusive list of factors or guideposts that a court should consider for this analysis: (1) whether the theory can be and has been verified by the scientific method through testing; (2) whether the theory has been subjected to peer review; (3) the known or potential rate of error; and (4) the general acceptance of the theory in the scientific community. *Id.* It is incumbent upon the trial court to carefully consider these factors before admitting any expert scientific evidence. The *Daubert* test is a flexible one and there is no requirement that an expert’s testimony satisfy each of the listed factors. *United States v. Vitek Supply Corp.*, 144 F.3d 476, 485 (7th Cir. 1998). However, the record in this case reveals that the district court conducted virtually no *Daubert* analysis of Petry’s qualifications in light of these factors.

A very significant *Daubert* factor is whether the proffered scientific theory has been subjected to the scientific

method. *Bradley*, 42 F.3d at 438. It is undisputed that Petry did not conduct any scientific tests or experiments in order to arrive at his conclusions. Petry never produced any studies, tests or experiments to justify or verify his conclusions, despite his representations to the court that such test results would be forthcoming. In our opinion, the absence of any testing indicates that Petry's proffered opinions cannot fairly be characterized as scientific knowledge. Personal observation is not a substitute for scientific methodology and is insufficient to satisfy *Daubert's* most significant guidepost. *O'Conner*, 13 F.3d at 1107 (holding that a physician who relied only on personal observation without any personal study or experiment to justify his conclusions did not meet the *Daubert* standard). Petry's opinions amount to nothing more than unverified statements unsupported by scientific methodology. Accordingly, the district court erred when it did not exclude Petry's testimony.

Further, Petry's testimony failed to satisfy any of the other *Daubert* guideposts for reliability. Petry presented no proof that his theory is generally accepted in the scientific community. *Cummins*, 93 F.3d at 369 (noting that *Daubert* suggests the review of experimental, statistical, or other scientific data generated by others in the field). Instead, his theory is novel and unsupported by any article, text, study, scientific literature or scientific data produced by others in his field. *Id.* (excluding an expert's scientific opinion where expert failed to "read any studies, surveys or analyses" in support of his theory). Additionally, by his own admission, Petry has not published any writings or studies concerning his "resistive short" theory. Unsubstantiated testimony, such as this, does not ensure that "the experts's opinion has a reliable basis in knowledge and experience of his discipline." *Deimer v. Cincinnati Sub-Zero Prods, Inc.*, 58 F.3d 341, 345 (7th Cir. 1995). The *Daubert* standard and Rule 702 are designed to en-

sure that, when expert witnesses testify in court, they adhere to the same standards of intellectual rigor that are demanded in their professional work. *Cummins*, 93 F.3d at 369. Petry's testimony simply does not satisfy this standard of reliability.

Petry's "resistive short" theory was relevant to Maytag's contention that the electrocution would not have occurred if the outlet was grounded, and therefore, to the ultimate issue of the parties' comparative faults. The jury returned only a general verdict, so it cannot be determined whether the jury relied on Petry's testimony in apportioning fault. Because we find that Petry's testimony was improperly admitted, a new trial is required.

B. Pretrial Order

Maytag also argues that the district court's rulings in Pretrial Order No. 2 were erroneous. The pretrial ruling states that: (1) adequate warnings cannot render a product with a manufacturing defect non-defective under Indiana law, even if compliance with the warnings would have rendered the product safe; (2) misuse is not a complete defense to a strict liability claim, but rather a factor going to the issue of comparative fault under section 34-20-8-1 of the Indiana Code; and (3) even if misuse is a complete defense, the failure to follow the manufacturer's instructions does not constitute misuse as a matter of law. Maytag argues that these rulings do not correctly apply Indiana law on these issues and as a result, the district court improperly refused to allow Maytag to "assert, prove or argue that its warnings or Mr. Chapman's failure to comply therewith rendered the stove non-defective or constituted misuse." Generally, we review a decision in a pretrial order to admit or bar certain evidence for an abuse of discretion. *Hotelling v. Chubb Sovereign Life Ins. Co.*, 241 F.3d 572, 578 (7th Cir. 2001). In this case, however, the district

court first made determinations regarding Indiana law; such determinations of law are reviewed *de novo*. *Donovan v. Robbins*, 752 F.2d 1170, 1178 (7th Cir. 1985) (“Even when the standard is abuse of discretion, review for errors of law is plenary”).

We find that the district court’s pretrial order is not contrary to Indiana law. First, Maytag’s warnings have no bearing on the defective condition of the range. It is undisputed that Maytag’s range was manufactured with a defect. We believe that the district court correctly determined that “adequate warnings will not render a product with a manufacturing defect non-defective,” regardless of whether compliance with the warnings would have rendered the product safe. Although Maytag provided numerous warnings with which Mr. Chapman failed to comply, “warnings cannot make a dangerous product safe.” *Marshall v. Clark Equip. Co.*, 680 N.E.2d 1102, 1105 (Ind. App. 1997). Accordingly, it was well within the discretion of the district court to hold that warnings will save a product from being defective only when a product is without manufacturing defects. *See, e.g., Glover v. BIC Corp.*, 6 F.3d 1318, 1323 (9th Cir. 1993) (holding that “[a]lthough an adequate warning will prevent the reliance on a theory of strict liability in a failure to warn defect case, such a warning will not make safe a product with a manufacturing defect”).

Second, the district court did not err when it determined that the defense of misuse is not a complete defense, but instead is an element of comparative fault. The court’s order cites the amendment to the Indiana products liability statute, which states: “The fault of the person suffering the physical harm . . . shall be compared by the trier of fact in accordance with [sections of the comparative fault act].” The Indiana General Assembly defined “fault” as “an act of omission that is negligent, willful, wanton, reckless or intentional toward the person or property of others.” I.C. § 34-20-8-1. The district court deter-

mined that any “misuse” falls within the scope of the definition of “fault.” Accordingly, the court concluded that since a jury is directed to compare all “fault” in a case, it was the intent of the legislature that “misuse” be a part of the comparative fault analysis, rather than providing a defendant with a complete defense. We find that this interpretation of Indiana law is not an abuse of discretion.

Finally, Maytag challenges the district court’s determination that Mr. Chapman’s failure to heed the warnings is not “misuse” under Indiana law. In support of its position, Maytag cites only Indiana cases in which the defendant was injured by a defect-free product. We agree with the district court that the Chapmans’ case is extraordinary and, therefore, distinguishable, based on the undisputed fact that the Maytag range was defective. The court reasoned that “an Indiana court would interpret the statute and make the policy decision to not allow Maytag to assert the defense of misuse on the basis of Mr. Chapman’s failure to comply with its warnings.” Again, we find that this conclusion was within the sound discretion of the district court.

CONCLUSION

For the foregoing reasons, we REVERSE and REMAND this matter to the district court for a new trial.

A true Copy:

Teste:

*Clerk of the United States Court of
Appeals for the Seventh Circuit*